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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,571	09/27/2006	Takeshi Ikeda	2006_1611A	6585

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EXAMINER	
GLASS, ERICK DAVID	

ART UNIT	PAPER NUMBER
2837	

MAIL DATE	DELIVERY MODE
01/08/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/594,571

Applicant(s)

IKEDA ET AL.

Examiner

Erick Glass

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/27/06</u> . | 6) <input type="checkbox"/> Other: ____. |

Claim Objections

Claims 2, 3 are objected to because of the following informalities: Claim 2 reads, "an absolute position signal" it should be "said absolute position signal. It also reads, "the upper turning point and near the lower turning point", it should be "an upper turning point and near a lower turning point". Claim 3, does the same to "an absolute position signal", it should be "the absolute position signal". Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claims 6 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how the motor is reversing (moving) when it is in a locked condition (defined by lack of movement). It is unclear what being "judged" is determining. Judged is defined by forming an opinion. Not sure what an opinion of the circuits status does.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, and 8-10, are rejected under 35 U.S.C. 102(b) as being anticipated by Miyazaki et al (US 6,240,098).

With respect to claim 1, Miyazaki teaches a wiper control method for driving a motor to rotate forwardly and reversely so as to reciprocate a wiper arm (fig. 1, 4) for a wiping operation and controlling the operation (abstract) of the wiper arm according to an absolute position signal output (fig. 3, 18) when the wiper arm is located at a predetermined position (fig. 4, upper and lower pre-reversing position) and a relative position signal output (fig. 3, 17) as a function of the rotation of the motor, characterized in that the wiper arm is driven for a wiping operation according to the output condition of the absolute position signal and that of the relative position signal; and the sense of rotation of the motor is reversed according to the absolute position signal (columns 5, lines 50-63; 6, lines 1-9) when the relative position signal becomes abnormal (columns 5, lines 64-65; 6, lines 10-12).

With respect to claim 2, Miyazaki teaches an absolute position signal is output at a first reference position and at a second reference position (fig. 4, upper and lower pre-reversing position) arranged respectively near an upper turning point and near a lower turning point (fig. 4, upper and lower reversing position) of the wiper arm and, when the relative position signal becomes abnormal (columns 5, lines 64-65; 6, lines 10-12), the sense of rotation of the motor is reversed according to the absolute position signal output at the first reference position and the absolute position signal output at the second reference position (columns 5/6; lines 50-67 and lines 1-12).

With respect to claim 3, Miyazaki teaches in that the sense of rotation is reversed when a predetermined time period has elapsed since the last acquisition of an absolute position signal (column 7, lines 34-38).

With respect to claim 4, Miyazaki teaches the sense of rotation is reversed when an absolute position signal is acquired (column 7, lines 34-38).

With respect to claim 5, Miyazaki teaches a wiper control method for driving a motor to rotate forwardly and reversely so as to reciprocate (abstract) a wiper arm (fig. 1, 4) between an upper turning point and a lower turning point (fig. 4, upper and lower pre-reversing position) for a wiping operation and controlling the operation of the wiper arm according to an absolute position signal output (fig. 3, 18) when the wiper arm is located at a predetermined position and a relative position signal output (fig. 3, 17) as a function of the rotation of the motor, characterized in that the wiper arm has restriction means for mechanically restricting its operation at operation limiting positions arranged respectively beyond the upper turning point and beyond the lower turning point (column 6, lines 21-47); the wiper arm is driven for a wiping operation according to the output condition of the absolute position signal and that of the relative position signal (columns 5/6; lines 50-67 and lines 1-12); and the sense of rotation of the motor is reversed when the relative position signal becomes abnormal (columns 5, lines 64-65; 6, lines 10-12) and the wiper arm is restricted by the restriction means (column 6, lines 21-47).

With respect to claim 6, Miyazaki teaches in that the sense of rotation of the motor is reversed when the wiper arm gets to one of the operation limiting positions and the motor falls into a locked condition.

With respect to claim 7, Miyazaki teaches in that the motor is judged to be in a locked condition when the flow rate of the electric current being supplied to the motor exceeds a predetermined level.

With respect to claim 8, Miyazaki teaches a wiper control method for driving a motor to rotate forwardly and reversely so as to reciprocate (abstract) a wiper arm (fig. 1, 4) for a wiping operation and controlling the operation of the wiper arm according to an absolute position signal output when the wiper arm is located at a predetermined position (fig. 4, upper and lower pre-reversing position) and a relative position signal output (fig. 3, 17) as a function of the rotation of the motor, characterized in that the wiper arm is driven for a wiping operation according to the output condition of the absolute position signal (fig. 3, 18) and that of the relative position signal; and the motor is driven at a constant output (column 6, lines 65-67) and the sense of rotation of the motor is reversed in every predetermined time period when the relative position signal becomes abnormal (columns 5/6; lines 50-67 and lines 1-12).

With respect to claim 9, Miyazaki teaches wiper control method for driving a motor to rotate forwardly and reversely so as to reciprocate (abstract) a wiper arm (fig. 1, 4) between an upper turning point and a lower turning point (fig. 4, upper and lower pre-reversing position) for a wiping operation and controlling the operation of the wiper

arm according to an absolute position signal output (fig. 3, 18) when the wiper arm is located at a predetermined position and a relative position signal output (fig. 3, 17) as a function of the rotation of the motor, characterized in that the wiper arm is driven for a wiping operation according to the output condition of the absolute position signal and that of the relative position signal; the sense of rotation of the motor is reversed according to the absolute position signal when the relative position signal becomes abnormal (columns 5, lines 64-65; 6, lines 10-12); and operation limiting positions are arranged respectively beyond the upper turning point and beyond the lower turning point so as to mechanically restrict (column 6, lines 21-47) the operation of the wiper arm and the sense of rotation of the motor is reversed when the absolute position signal becomes abnormal in addition to the relative position signal and the wiper arm gets to one of the operation limiting positions (column 6, lines 21-47).

With respect to claim 10, Miyazaki teaches if it is not possible to detect that the wiper arm has reached one of the operation limiting positions (column 6, lines 21-47), the motor is driven at a constant output (column 6, lines 65-67) and the sense of rotation of the motor is reversed in every predetermined time period (column 7, lines 34-38).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erick Glass whose telephone number is 571-272-8395. The examiner can normally be reached on 8-5 M-F.

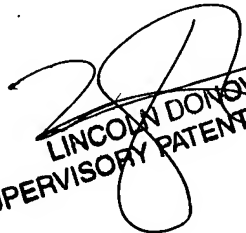
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on 571-272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EG


LINCOLN DONOVAN
SUPERVISORY PATENT EXAMINER